

MARKETPLACE

For Recycling Commodities

Kentucky Recycling Assistance Section

July 2015

Study Examines Packaging Flow at MRFs

According to Resource Recycling, the MRF Material Flow Study, conducted by Ann Arbor, Mich.-based Resource Recycling Systems (RRS), suggests materials recovery facilities (MRFs) today lose anywhere from 3 to 12 percent on incoming plastic packaging to the paper stream. Some products increasingly accepted in curbside programs are particularly hard to detect and sort, the study points out, with average "loss rate" at 29 percent for plastic clamshells and 18 percent for cartons.

"For the MRFs that receive the material, it is not always easy to keep sorting technologies and techniques on pace with this expanding mix," the report states.

The study was funded by the American Chemistry Council, the Association of Postconsumer Plastic Recyclers, the Carton Council, the Foodservice Packaging Institute and the National Association for PET Container Resources. It was prepared with the help of Reclay StewardEdge and Moore Recycling Associates.

To complete the study, a variety of food-service packaging products, including containers, cartons and cups, were "seeded" into the incoming streams of five U.S. MRFs. The MRFs, four single-stream facilities and one dual-stream facility ranging in throughout from 10 to 35 tons per hour, were assessed based on how well existing systems managed to effectively separate plastic from paper products.

The MRFs that managed to separate materials most effectively were those that had a sufficient number of well-maintained disc screens. While two of the five MRFs lost 12 percent of plastics to the paper stream, the study points out one MRF achieved just a 3 percent loss rate and did so due to an "Adequate number of screens for the incoming volume and material type." In addition, a "significant improvement" was achieved by the two MRFs with the highest loss rates once existing screens were maintenanced.

Optical sortation systems were also noted as a key factor to aiding separation and recovery of commingled recyclables.

On the design and consumer level, the study finds that the form of recyclables entering MRFs has "a strong influence on the loss of packaging to the paper stream." The packaging types with the lowest loss rates—plastic bottles, cups and containers—were round, while lightweight and crushable products, such as clamshells and cartons, more often ended up the wrong stream. By flattening plastic items, consumers can inadvertently

cause a MRF to sort the material into the paper stream, the study concluded.

"The study found that three-dimensional objects (packages in their original form) versus two-dimensional (flattened/crushed objects) have a higher likelihood of making it through the system to the appropriate container lines and bales," RRS CEO Jim Frey said in a press release.

For more information on this report, check out http://www.cartonopportunities.org/sites/default/files/files/MRF%20Study%20Report%20Press%20Release%20Fl https://www.cartonopportunities.org/sites/default/files/files/files/files/MRF%20Study%20Report%20Press%20Release%20Fl <a href="https://www.cartonopportunities.org/sites/default/files/fi

Resource Recycling's Recycling Market Prognosis--July and August

DemandPriceFerrousSomewhat sluggishSlow rise

Aluminum Nothing to brag about Flat at best

Paper Improving Slow rise

Plastic Bales will sell Slow upward

movement

Global Environmental Services

The following are the results of the state's e-Scrap contract with Global Environmental Services (GES) as the new vendor:

--Weight in pounds: 477,274 lbs. (238.6 net tons)

-- Payment to generators: \$29,567.63

--Deductions to date: \$0.00

Contact Tom Heil at 502-564-6716, ext. 4640 or at Thomas.Heil@ky.gov and click on http://waste.ky.gov/RLA/recycling/Pages/Electronics Recycling.aspx if you have any questions about electronic recycling.



COMMODITY	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jul-14
PAPER-\$/TON	RISI Official Board Markets (Midwest/Chicago area) FOB							
-	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jun-14
#2 mixed paper	\$35-40	\$30-35	\$30-35	\$30-35	\$30-35	\$30-35	\$40-45	\$35-40
#37 sorted office paper								
(SOP)	\$135-145	\$135-145	\$135-145	\$135-145	\$130-140	\$130-140	\$130-140	\$130-140
#8 ONP	\$50-55	\$45-50	\$45-50	\$45-50	\$40-45	\$40-45	\$45-50	\$50-55
#40 sorted white ledger								
(SWL)	\$220-230	\$220-230	\$230-240	\$230-240	\$230-240	\$230-240	\$230-240	\$200-210
#11 OCC	\$65-70	\$60-65	\$60-65	\$60-65	\$60-65	\$60-65	\$70-75	\$75-80
<u>PLASTICS-</u> ₡/LB.	Recycling Markets.Net/Secondary Materials Pricing - FOB							
<u>-</u>	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jun-14
#1 PET - mixed (clear &								
green)	\$0.16	\$0.14	\$0.13	\$0.13	\$0.12	\$0.13	\$0.13	\$0.18
#2 HDPE (natural-milk jugs)	\$0.33	\$0.25	\$0.26	\$0.31	\$0.31	\$0.33	\$0.36	\$0.51
#2 HDPE (colored-detergent								
btls.)	\$0.24	\$0.19	\$0.23	\$0.30	\$0.28	\$0.25	\$0.25	\$0.30
GLASS-\$/TON	Recycling Markets.Net/Secondary Materials Pricing - Delivered							
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jun-14
clear (flint)	\$32.00	\$33.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00	\$32.00
brown (amber)	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00	\$22.00
green	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00	\$11.00
<u>METALS</u>	Recycling Markets.Net/Secondary Materials Pricing - Delivered							
<u>-</u>	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jun-14
aluminum beverage cans								
(UBC) cents/lb.	\$0.79	\$0.81	\$0.79	\$0.72	\$0.66	\$0.57	\$0.57	\$0.78
	Recycling Markets.Net/Secondary Materials Pricing - Delivered							
	Jan-15	Feb-15	Mar-15	Apr-15	May-15	Jun-15	Jul-15	Jun-14
steel cans \$/TON	\$110-120	\$110-120	\$85-100	\$65-85	\$60-85	\$60-85	\$60-90	\$110-120



Energy and Environment Cabinet

Kentucky Recycling Assistance Section

Department for Environmental Protection Division of Waste Management 200 Fair Oaks Lane, 2nd Floor Frankfort, KY 40601

The Kentucky Division of Waste Management does not discriminate on the basis of race, color, religion, sex, sexual orientation, gender identity, national origin, age, disability or veteran status. The division provides, on request, reasonable accommodations necessary to afford an individual with a disability an equal opportunity to participate in all services, programs and activities. Contact ShannonL.Powers@ky.gov to request materials in an alternate format.